

# STATISTICS AND DATA SCIENCE M.S.

## Admission Requirements

Complete the following admission requirements:

- Submit three letters of recommendation concerning the applicant’s educational background and quantitative training.
- Submit complete transcripts for all college-level work.
- Submit a resume.
- Submit a written statement of goals.
- The applicant must have completed a bachelor’s degree from an accredited institution with a GPA of at least 3.0.
- Must have completed the following courses or their equivalent with a B grade or better: full calculus sequence (Calculus I (MATH F251X), Calculus II (MATH F252X), Calculus III (MATH F253X)); note that students substituting Essential Calculus with Applications (MATH F230X) for Calculus I must take MATH F252X and MATH F253X before acceptance; a course in linear algebra (MATH F314); at least one introductory statistics or probability course (STAT F200X, STAT F300 or MATH F371, MATH F408); and Regression and Analysis of Variance (STAT F401). Students lacking MATH F314 or STAT F401 may be accepted on probation.

## Program Requirements

< Back to Department (<http://catalog.uaf.edu/academic-departments/mathematics-statistics/>)

## Minimum Requirements for Statistics and Data Science M.S.: 30 credits

Code	Title	Credits
<b>General University Requirements</b>		
Complete the graduate general university requirements. ( <a href="http://catalog.uaf.edu/masters/#gurmastersdegreestext">http://catalog.uaf.edu/masters/#gurmastersdegreestext</a> )		
<b>Master’s Degree Requirements</b>		
Complete the master’s degree requirements. ( <a href="http://catalog.uaf.edu/masters/#masterofscienceproject">http://catalog.uaf.edu/masters/#masterofscienceproject</a> )		
<b>Statistics and Data Science Program Requirements</b>		
Complete the following:		
STAT F651	Statistical Theory I	3
STAT F652	Statistical Theory II	3
STAT F653	Statistical Theory III: Linear Models	3
STAT F654	Statistical Consulting Seminar	1
STAT F698	Non-thesis Research/Project	3
Complete two of the following:		
STAT F461	Applied Multivariate Statistics	
STAT F602	Experimental Design	
STAT F605	Spatial Statistics	
STAT F611	Time Series	
STAT F621	Nonparametric Statistics and Machine Learning	
STAT F631	Categorical Data Analysis	
STAT F641	Bayesian Statistics	

STAT F661	Sampling Theory	
STAT F671	Statistical Computing	
Complete at least 6 credits of approved courses from an application area or courses with substantial statistical and/or mathematical content. <sup>1</sup>		6
<b>Total Credits</b>		<b>25</b>

<sup>1</sup> Students working in subject areas involving significant non-English literature will be expected to read the appropriate foreign language.

**Note:** Each student must take and pass a two-part comprehensive exam. The first part, written by the statistics faculty, is a written exam (not a take-home exam) covering the material in the core statistics courses. The second part is an oral exam covering follow-up questions from the written exam as well as any material from courses the student has taken along with their project.